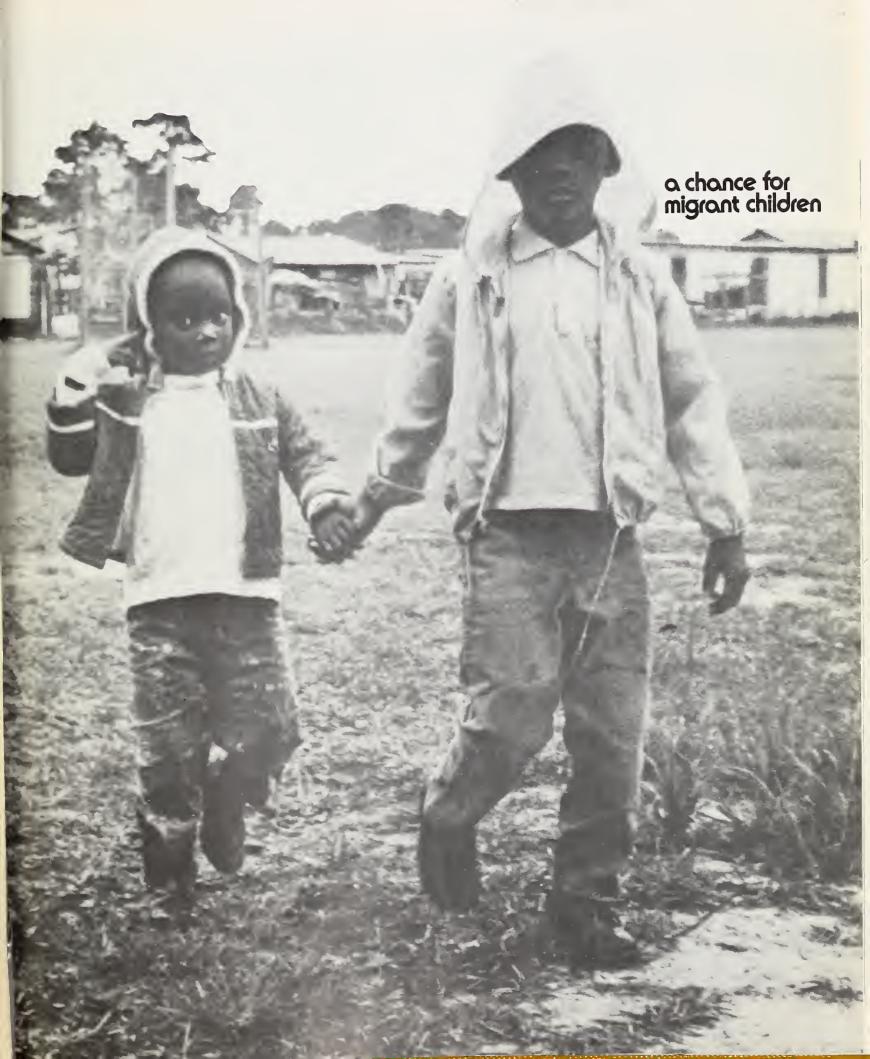
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# Food and Mutrition April 1972 · Volume 2 · Number 2



## CHILD CARE: Learning With Food



### A Chance for Zellwood Children

By Ralph E. Vincent

"GETTING IT ALL together," is what's happening at the Zellwood Migrant Child Care Center. Much of the reason for its happening lies in the dynamic, cheerful person of Effie Willis, director of this haven for the children of migratory farm workers in the orange growing section around Orlando, Florida.

Mrs. Willis knows the hard life of the migrant worker by experience. She knows that "following the season" is risky at best and that vagaries of the weather, such as an untimely frost or rain, can mean halted farm work or no work at all. Such bad weather also can mean a financial disaster to itinerant farm laborers.

Knowing the difficult life of the migrant, and especially the bad effects the rootless life has on the children shuffled from one new school and strange community to another, Mrs. Willis is thankful she can do something to help.

For 31 years she has cared for children in private homes and nurseries; first in North Carolina, where she was born, and later in Virginia and New York, where one of her two daughters now runs a day care center. Mrs. Willis also operated a nursery at the Zellwood Methodist Church before she began directing the center for migrant children.

The Zellwood center cares for approximately 70 children—from 2-week-old infants to 5-year old preschoolers. Slightly more than half are black with nearly as many white children and a sprinkling of Mexican-American youngsters.

The center opens at 6 a.m., and the children start arriving at about 6:30. The smaller children and infants are

brought by their parents by car on their way to work. But the bigger children come walking with their older brothers and sisters, who take them to the center on their way to the school bus.

The child care center is located in a former all-black elementary school phased out last year by consolidation of school districts. The center rents the three small school buildings and is responsible for their upkeep. The Zellwood Improvement Center (ZIP), which sponsors the center, has requested a more permanent arrangement, such as a purchase or lease contract.

Mrs. Willis has an active interest in ZIP, a community action organization dedicated to improving the black community squeezed in between the village of Zellwood and the sprawling orange groves and vegetable farms. The members of ZIP have installed a row of street lights down the unpaved main road of the community and have purchased an acre of unimproved land on which they hope



One of the many activities at the Zellwood Migrant Child Care Center is cleaning up (left).

No job is too big or small for Mrs. Effie Willis, the director of the day care center (below). Whether it's helping supervise at the playground, fixing scrapes or scratches, settling differences, admiring artwork in the classroom, or helping the cook in the dining room, she doesn't mind at all.

eventually to build a community got." The center put a sign in the center. Mrs. Willis has dreams of one post office saying "open, everyone," day seeing her child care center and watched as the number of children coming in steadily grew.

Since June 1971, the child care For the first 13 months, Mrs. Willis kept the center going on a hand-tocenter has been receiving Federal support through programs of the Department of Health, Education and Welfare, and the Food and Nutrition Service of the Department of Agriculture. The center receives both financial and commodity assistance from the FNS Special Food Service Program for Children, which is administered by the Florida State Department of Education.

This pays the cost of food and some kitchen equipment to serve breakfast, lunch and a mid-afternoon snack. The kitchen and dining room, equipped with a stove and refrigerator donated from homes, are improvised in a converted classroom. The dishes are washed by hand.

With a staff of 14 persons—comprised primarily of mothers from the migrant community and including an educational director—the center con-

mouth existence through the concentrated efforts of her staff and the assistance of concerned individuals and organizations. Churches and civic groups from Orlando and neighboring communities donated money, toys, equipment, and clothing which could be used for the children or sold to

housed there.

raise funds. "We had nothing to start with," says Mrs. Willis. "We had rummage and cookie sales on weekends-that's where we got our money."

center and found Mrs. Willis sorting clothing that had been donated by a society of Jewish women. "They took pictures and wrote a story saying

ORLANDO SENTINEL walked into the

One day some reporters from the

that this was a center of love," she recalls. It brought "the biggest publicity and the most money we ever ducts training and educational activities and provides food service for the children. Further assistance comes from a young couple from Pennsylvania, the second Mennonite couple to work there.

As Mrs. Willis sees it, the advantages of the center are considerably more than the convenience of a place for parents to leave their children while they work in the fields. The classroom activities, which include everything from arts and crafts to good habits of cleanliness, are helping to widen the horizons of the children.

The center also offers them op-

portunities to play with large toys, such as wagons and bicycles, which are often inaccessible to children whose families must limit their belongings to things that can be easily packed up and moved at short notice.

Moreover, organized activities are helping to prepare them for the learning skills they will encounter during the primary grades, and perhaps, equally important, helping them to work and play cooperatively with other children.

"Because I've been a migrant," Mrs. Willis says, "I know that most migrant children have a certain shyness in them. The kids go here and there and

stay 3 or 4 months . . . and they're shy all the time because they haven't made good friends." She feels that the child care program will help the youngsters overcome this shyness.

In addition, by employing women from the migrant community, the center is enabling these mothers to stay throughout the year with their younger children, while the fathers and older children follow the harvest season up the eastern seaboard.

"We're grateful that we have something here to offer them, "Mrs. Willis explains, "so that they can be here the year 'round, and their children can start to school and go on." She knows from experience that her child care center is giving a head start to the children, and helping to break the bleak migrant cycle for some of their parents.

### "Educare" for Preschoolers

"WE WASTED A LOT of food in the beginning because we had to teach the children to eat," said Mrs. Alice Evans, Director of the Bryant-Glenwood Educare Center in Minneapolis. "Many of them were not used to eating the kinds of food we serve, such as fresh fruits, vegetables, and meats. We had one girl who was so used to not eating that she couldn't—even though she was extremely undernourished and sickly. When she did eat, she couldn't take very much food at one time."

Located in the basement of the Prince of Glory Church, the "educare" center began in the summer of 1968 as a half-day child care center for children from the surrounding low-income housing project. At the end of the summer, the community was polled to see if it wanted the center to continue. The answer was an emphatic "yes" and a plea for it to operate throughout the year. The school now enrolls 75 children from



Zellwood youngsters enjoy an assortment of play equipment, most of which has been donated. Among their favorites are a pint-sized log cabin and wooden tepee, built by an aide to the center from the Mennonite Church. A small shed in a corner of the playground houses a family of rabbits, brought in by one of the children to share with his friends.

2 to 6 years old and is open 10 hours a day.

While Mrs. Evans was expanding the day care program, she met a certified Montessori teacher looking for a place to start a school. Their ideas meshed and the women joined forces to create the "educare" center.

In December 1968, USDA contacted Mrs. Evans about starting a feeding program for the 30 children enrolled. With the Department's help, she began serving lunch and a snack in February 1969. When the program expanded last year, this time with the aid of the Minnesota Department of Education, she added breakfast and another snack.

The concept of combining day care and education is not unique. However, the way in which Bryant-Glenwood's teachers have utilized Montessori techniques to maximize the learning possibilities offered by a food program is unusual. The children help prepare and serve meals, which enables them to actively participate in the learning experience.

This kind of participation is a major aspect of the Montessori theory of preschool education. Originally developed by Dr. Maria Montessori, a leading child neurologist from Italy, the method emphasizes free physical activity, informal and individual instruction, early development of writing and reading, and extended sensory and motor training. Montessori education is aimed at developing the whole child.

The Montessori teachers at Bryant-Glenwood were pleased with the addition of the food program. "It enabled us to incorporate a whole new aspect into the child's experience," said Mrs. Evans, "that of learning to appreciate nutritious foods."

Building a food service staff to carry out the nutrition education program was difficult at first. Mrs. Evans wanted to recruit local people to provide them with on-the-job training and experience. But she had difficulty in finding trained nutritionists to instruct her food service crew.

To solve this problem, she joined with other north Minneapolis day care centers to hire a nutritionist provided by the Minnesota health

department. This woman has been a great help to them in planning interesting and nutritious menus. She also has been able to guide them in purchasing foods and in using USDA donated foods.

However, Mrs. Evans and other day care center directors would prefer that USDA and the Minnesota Department of Education expand their technical and professional staffs so that they can provide more nutritional services. As a result, the State is planning to hire nutritionists as field resource persons to serve centers supported by State funds.

In addition to using the services of

a nutritionist, the northside directors are training their cooks in another way. They have arranged to send them to a nutrition education course at Minneapolis Vocational School and to have them hold conferences to exchange recipes and ideas. Mrs. Evans hopes that this will lead to a continuing education program which will allow the cooks to become certified food service personnel.

In these ways the Bryant-Glenwood Educare Center is continually growing. The "educare" center is doing more than just educating preschool children-it's setting an example for the whole community.



# Missouri's Volunt

By Charles T. Weirauch

FTER MAKING A nutrition survey that revealed the extent to which hunger and malnutrition exist in Missouri, Mrs. Betty Hearnes, wife of the Governor, and the Missouri Association for Social Welfare's steering committee decided to establish a volunteer food aid coordinating committee.

Funding for the statewide project was arranged in April 1970 through the State of Missouri Division of Welfare and a U.S. Department of Health, Education and Welfare research and demonstration grant.

The action committee, Volunteers Against Hunger, has since been established in 80 counties where USDA's food distribution program is in operation.

"In these countries we work to educate citizens about the food aid programs and to obtain their support of it," says Tom Snodgrass, VAH project coordinator.

"The VAH movement is built on the concept that hunger and malnutrition can be eliminated in all counties across the Nation if enough dedicated citizens pool their efforts," says Mrs. Daniel Schlafly, chairman of the State volunteer committee.

The primary goal of VAH is uniting such people against hunger in Missouri. However, its organizers can see no reason why their concept cannot be adapted in all other States.

"We believe that many persons want to help a government program that aids their community," Snodgrass says. "Once VAH convinces the public that effective help programs do exist, individuals, groups and businesses will often jump at the chance to work with them."

When they do respond, the VAH

county committee is close at hand to direct their volunteer activities.

In setting up committees in new counties, VAH personnel use a uniform four-page organization plan.

"This plan has been adapted without change by the counties because of its simplicity," Snodgrass says.

The first step calls for the Missouri Association for Social Welfare workers to recruit a county chairman from the community in which he is to work. He in turn must familiarize himself with local operations of the food distribution center and county welfare agency.

"We urge such a first step because the Volunteers' chairman is a primary educational source," Snodgrass points out. "The more the chairman knows about the program operations and related social aid problems, the more he will be able to convince others to join in the effort."

Other steps involve talking to University of Missouri Extension nutritionists, county coordinators of community action programs, and others working with disadvantaged persons. It is hoped that these groups will serve as advisors for VAH and point out sources of volunteers. Meeting with them also might point out weak areas in the food distribution plan where such volunteers could concentrate their efforts. They might also know of good contacts among food program participants. VAH members have found it important to have persons from all sides pass along their feelings and information.

"While working with these people, it is important for the county chairman to make clear that VAH will not be duplicating their functions," Snodgrass emphasizes. "We're organized to explain the food distribution program's existence in the com-

munity and educate people in it use. Other agencies utilize it, bu do not concentrate their program efforts there as we do."

"Volunteers from the local community relate to people in need a their own level," says Mrs. Schlafly Volunteers can supplement the extensive activities of University of Missouri nutritionists by getting recipes and other nutrition information out to those who need it.

Other volunteers may be needed for more physical efforts, such as taking USDA food by proxy slip to those who cannot come in for it, taking others down to the center for recertification, and by helping out it the food distribution center.

Mrs. Schlafly emphasizes that it is the job of Volunteers Against Hunge to help build bridges of communication. "We must be realistic and admit that we have not found the final solution to the problem. However, we must work to use the system we have to its fullest advantage. VAH should be there to enhance whatever programs work best."

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Such response is attributed to good coordination of volunteer efforts by Mrs. Celesta Cannell, chairman of the Callaway County chapter of the Statewide Volunteers Against Hunger, and James Baysinger, county food distribution supervisor.

"It's important to utilize a volunteer's time in accordance with his work interests, but we have to make sure we have enough people to carry out all of our activities," says Mrs. Cannell.

Need for volunteers becomes apparent when a person walks into the Fulton food distribution center on one of the ten monthly distribution days. On that day, as many as 150 household recipients might come in for their monthly food allotments.

The first volunteers a recipient meets are college students from

Westminster and William Woods Colleges. About 150 students spend some time at the center checking food supplies and making sure that the recipients receive proper amounts. They also see that program participants have a way of getting their food home.

For those persons who cannot come in to pick up their food because of transportation or health problems, volunteers may obtain a proxy slip. This authorizes them to pick up the food and drive it to those in need.

Students from Fulton High have been helping out in such deliveries both on their own and through the Drive to Serve program.

This program utilizes driver education cars to deliver USDA foods to elderly recipients who live out of town and are disabled. The Callaway

County Drive to Serve Program one of six pilot projects established by USDA's Food and Nutrition Service in cooperation with the National Recross to test this new approach in delivering foods.

Besides getting food to those who would not normally be able to get if Drive to Serve lets the students se how the food distribution program can help, and many students have become volunteers.

Mrs. Dorothy Meyer, Red Cross representative for the Callaway County area, has been helping to coordinate these volunteers. Occasionally they borrow the Red Cross station wagon to make food deliveries.

"Students in the Drive to Serve Program and other volunteers often tell people in the community about the merits of the food aid plan," says

Volunteers Against Hunger in Callaway County, Missouri, are helping out in the Fulton food distribution center. One volunteer checks to see if a recipient has received the amount of food she was due (left) while others are packaging the foods for the recipients to take home.





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"Students in the Drive to Serve Program and other volunteers often tell people in the community about the merits of the food aid plan," says Mrs. Cannell. "Such grassroots communication is highly effective in edu-

Education is an essential part of the volunteer operations-for the recipient, other welfare agencies and the community in general. The recipient often gets his first taste of this when picking up food at the center, where nutrition aides from the University of Missouri Cooperative Extension Service pass out recipes and information on how to get the full nutritional value from foods received.

"Volunteers supplement such activity by going out into recipients' homes and disseminating similar information," says Mrs. Cannell, Although Extension aides also go into the community, the volunteers help them to reach all potentially needy households.

Even then, there are not enough cating the community about food Efforts have to be concentrated on volunteers for this kind of work. persons who need help the most.

To find out where these areas are, volunteers have contacted local welfare agencies. From them they have learned where they might be able to make the most impact.

The Callaway volunteer group has also discovered from the welfare agencies that there are organizations which offer aid to community improvement projects. Such groups as the Council of Ecumenical Ministers, League of Women Voters, and other business groups and civic clubs have supported the food distribution pro-

Faced with a possible end to food program operations last spring, the Callaway Volunteers Against Hunger launched an emergency fund drive to Callaway county."

cover the \$320 a month in operating

Some volunteers made appeals to civic groups and businesses for contribution pledges. Others, such as college and high school groups, recruited funds from their peers and the community.

In just two weeks the VAH group reached its goal, getting enough cash and pledges to cover operating costs. This money allows 2,650 county recipients to receive their share of the \$40,000 a month in food distributed at the Center.

The Callaway drive is holding its own, but proposed State legislation would allow the number of recipients to increase,

"We're going to make sure", Baysinger says, "that the food distribution program stays and grows in







food and nutrition

### Sing a Song of SPINACH!

"MOM—YOU WROTE a song about spinach!?" The teenage daughter of Mrs. Margaret Gooding, music teacher at the Schulze Elementary School in Irving, Texas, found it hard to believe.

Yet Mrs. Gooding's current repertoire which she uses in her music classes includes such songs as "Eat Your Spinach," "Vegetables and Fruits," "Diets," "Milk and Bread."

"Vitamins and minerals, important indeed,

They regulate, protect and feed... Bones, blood, teeth, muscle, nerves and tissue...

A healthy body is the issue."

Learning the importance of foods through song came about last spring due to the concern of Dr. John Townley, Superintendent of Irving Public Schools, and Mrs. Melbagene Ryan, school food service director, that children are not sufficiently aware of the importance of a proper diet to their health and well-being.

Since Mrs. Gooding teaches every child in Schulze Elementary, she could tie the subject in with her music.

But how do you do this in a music class? "I teach the alphabet, mathematics and sometimes geography and history as they pertain to music, so why not foods and nutrition?" Mrs. Gooding decided.

A search for songs to use failed to turn up much material. Mrs. Gooding found a few pertaining to



food, but nothing on nutrition. So she decided to write some herself. When school started last fall, she had a collection of songs teaching the value of the various foods.

The songs feature the four basic food groups and their relation to good health.

"We do a lot of talking as well as singing," said the music teacher.

"When we encounter a word, such as "cholesterol," which is a new term to the children, we stop the music and discuss what the word means and how it pertains to our health."

Mrs. Ryan asked her to include the word "diet" in one of the songs, since many children think this is just a way to lose weight.

How have the children responded to the songs? Obviously, the lyrics with their catchy tunes are most appealing.

"When are you going to stop singing those 'nutrition songs' at school?" one mother teasingly asked Mrs. Gooding. "When my children are at home, I have to listen to them from morning 'til night."

In October, 25 of the fifth and sixth grade students volunteered to present a program of the songs to the executive board of the Texas School Food Service Association.

The children came in voluntarily before school began and stayed after school to learn the songs in time for the program. They even gave up their Saturday to give the program.

The program presented for the

SFSA Executive Board included a sheet of cardboard mounted on an easel, on which the children "set" a table and filled in the foods necessary to a well-balanced meal.

"This is a subtle way of including a little practical knowledge on table setting," said Mrs. Gooding.

As a result of their presentation before the Irving School Board following the SFSA Executive Board meeting, the group has been invited to perform at the State meeting of the School Food Service Association in Houston in June.

Mrs. Gooding feels this trip will be a good experience for the children, since many have not been outside the immediate area.

Through singing about foods, these children are now more aware of the work of Mrs. Ryan and her staff in supplying students well-balanced meals which meet National School Lunch Program requirements.

The children now know these meals don't "just happen," explained Mrs. Gooding. "They are the result of careful planning and preparation."

"When I was a child, I learned the ABC's, nursery rhymes and even the books of the Bible through songs based on them. Although they may not have been too meaningful to me then, I remember things from this early training and benefit from this now," said Mrs. Gooding.

"The same can be true with nutrition education. I think these child dren will remember this information in song in the years to come." ITH NEW FOOD technology the decade ahead will see further development of a variety of new food choices. Tailored for particular uses, these new foods will offer almost unlimited taste, texture, appearance, aroma, and nutritional choices.

New foods can help ensure that the United States will have an abundant food supply that will be distributed and processed to provide adequate diets for the entire population.

In May 1969 the President stated his intent to eliminate hunger and malnutrition in the United States. He established the Food and Nutrition Service to accept this challenge and called on the food industry to work with FNS by making "nutritious foods widely available in popular forms."

Since then, through increased funding of the FNS child nutrition and family feeding programs, the number of people getting food has increased dramatically. But a heightened awareness and rising costs have made it clear that new foods, as well as new unds, are needed if poverty-based malnutrition is to be reduced or eliminated.

FNS believes that a properly balanced diet of conventional foods can provide adequate nutrition. However, American dietary habits and nutritional quality of processed foods change rapidly, making it more difficult to choose an adequate diet. We are, therefore, interested in new foods to the extent that they can improve the nutritional impact of FNS programs, or help extend its programs to eligible individuals and groups who are not participating.

Fortification and enrichment of foods are not new. Over 30 years ago bread flour in the United States was enriched with B vitamins and iron. Milk has been fortified with vitamin A and D for many years. Salt has been fortified with iodine to help eliminate a deficiency in the American diet. New breakthroughs in fortification have provided means of adding yet other nutrients, so that becomes possible to make widely used foods complete sources of nutrition.

In 1969 the Panel of New Foods of the White House Conference on Food, Nutrition and Health recommended "the implementation of an immediate food fortification program to relieve malnutrition." The Panel defined new foods as: traditional foods nutritionally upgraded beyond present standards; foods produced from new sources which simulate traditional foods; and wholly new classes and types of foods.

One way to provide new foods which contain higher nutrient levels is to fortify or enrich foods which are already widely used. However, fortification of any food can be useful. Basic foods (such as cereal products) could, ideally, be fortified with selected nutrients to such a level that, if they were the only food a person ate, they would supply adequate daily nutrient needs.

FNS criteria for acceptance of new foods include one or more of the following: improved nutrition, lower cost, greater convenience in preparation, greater acceptability, and/or improved stability. FNS acceptance of new foods must be oriented toward acceptance by the general population through commercial markets, and not solely toward Government food programs.

The program should be flexible enough to incorporate new knowledge and nutritional requirements brought out by clinical studies and nutritional surveys, or new consumption patterns. Fortification of too many foods, regardless of their contribution to the diet, could result in

# what's new in foods?



Dr. Daniel Rosenfield, Director of the Nutrition and Technical Services Staff, looks at some of the new food products: a fortified breakfast cake (also pictured below), textured vegetable protein, and enriched macaroni.



excessive intake of certain nutrients and unnecessary food costs.

Finally, FNS advocates that new foods be labeled to effectively define essential nutrients provided.

O. What are "new" foods?

A. These are foods or food components that have been put together in a new form or composition, usually as an answer to a specific need. They may also be familiar foods redesigned to meet new needs.

Convenience, simulated, and synthetic are names describing various new foods. Convenience foods are designed to save time and labor. On the commercial market are canned puddings, cake mixes, soup bases, and beef patties. Simulated foods, derived from natural sources, are designed to look or perform like conventional foods. "Bacon" pieces made from soy beans are in this category. Synthetic foods come from non-natural sources, and replace natural foods. Powdered orange drink from non-orange sources is an example.

Q. What is FNS looking for in new foods?

A. FNS is interested in foods to improve its feeding programs. They should be less perishable, more convenient, lower in cost, more functional, more nutritious, and at least as acceptable as the traditional alternates.

Q. How does FNS decide which new food to approve?

A. FNS has established a Food Evaluation Committee, comprised of nutritionists, food technologists, and economists within the Nutrition and Technical Services Staff, and program specialists. This group recommends new foods to the administrator, who may, in turn, ask for further evaluation from a Department-wide committee on processed food.

FNS also wants the results of a laboratory analysis for nutrient content and some indication of acceptability in schools before approving a product. The results of these tests are then compared with program need and requirements.

Q. Many new foods seem to emphasize proteins. Why?

A. Low-cost vegetable proteins help low-income families get enough

protein that they can afford. Also, lower-cost sources of protein can help control school feeding costs.

Q. Is there a national shift toward using more plant sources of protein?

A. Animal products are and have been our main source of protein—providing over two-thirds of our protein intake. In future years we may expect plant sources to provide more of our protein intake. Plant protein is already being processed into more acceptable forms.

Plant proteins have certain attributes that make them highly functional. They have a longer storage life than animal proteins; and because they generally have less flavor, they mix well with other foods. In soy proteins off-flavor has been a major problem limiting their use as human food, but this has largely been corrected.

Q. Have plant proteins been allowed in the National School Lunch Program?

A. Dry beans and peas, lentils, and peanut butter have been allowed as meat alternates for many years.

## Textured Vegetable Proteins

Q. What are textured vegetable proteins?

A. Textured vegetable proteins are made from oilseed or cereal products. The specifications for textured vegetable proteins allowed as partial meat alternate are contained in FNS Notice 219. These newly developed foods may contain other ingredients to help bind, stabilize, flavor, or color them. Soybeans are a common source material. Textured items from soy come in cubes, chunks, chips, granules, and rolls.

Q. What is USDA's interest in textured vegetable proteins?

A. They offer another choice of protein foods and can reduce costs of school lunches without sacrificing nutritional value. In addition, these products have functional advantages; they retain fat and moisture in cooking, and thus help retain flavor and moisture.

Q. Can schools be reimbursed if

they serve a 2-ounce serving of textured vegetable protein alone?

A. No. The serving must include at least 70 percent meat, fish or poultry.

Q. Are all textured vegetable protein products dry?

A. No. Some products are sold in frozen hydrated form. This form may be mixed directly with meat, and does not need to be pre-mixed with water.

Q. How should textured vegetable protein be mixed in a school kitchen? Are there any special problems?

A. It may be hydrated first and the hydrated product mixed with meat. After hydration the storage life is shortened and the product should be used right away.

The three ingredients (meat, water, and dry textured vegetable protein) may be combined in one operation. Seasonings may also be added in the one step. The important thing is to get them thoroughly hydrated and mixed.

Q. Is it necessary to develop new recipes for use of textured vegetable protein-meat mixtures?

A. Yes. Some companies now have such recipes available. These should be reviewed to assure that they are appropriate for local use. FNS has a fact sheet describing hydration and uses of textured vegetable protein which gives instructions for adapting the USDA card file recipes. Copies of the fact sheet are available from the Nutrition and Technical Services Staff.

Q. What textured vegetable protein-meat products might be expected to be the most acceptable?

A. Mixed dishes will probably be most popular, mainly because they are highly seasoned. Beef patties barbecued beef, lasagna, chili, sloppy joes, pizza, and meat balls may be the most popular entrees containing textured vegetable protein.

### Fortified Macaroni

Q. What is the new fortified macaroni?

A. Macaroni, as specified in FN Notice 218, is a protein-fortified, en

riched macaroni-type product. When prepared and served in combination ith meat, poultry, fish or cheese, it may be used to fulfill half of the protein requirement of the Type A lunch.

Q.. What is the Department's interest in fortified macaroni?

A. We are interested in new foods that will provide nutrition at lowest cost. The cost of an entree may be reduced if part of the protein is of plant origin. The combination of fortified macaroni (plant protein) and meat, cheese, or fish (animal protein) will provide high-quality protein at a lower cost than if animal protein were used alone.

Q. How does the fortified macaroni differ from regular or enriched macaroni?

A. It has 91 grams of protein per pound of dry product; regular enriched macaroni has only 57 grams. Also, the protein quality (biologically utilizable protein) in the fortified macaroni is higher. Macaroni made only from wheat flour is short in an essential amino acid—lysine. The cost of fortified macaroni is about the same as regular macaroni.

Q. How can this macaroni be used as a meat alternate in the Type A lunch?

A. One ounce of the fortified dry macaroni (measures 1/2-3/4 cup cooked) may be used as one ounce of meat alternate, when served with at least one ounce of meat, poultry, fish or cheese.

## Formulated Grain and Fruit Products

FNS Notice 180 (Oct. 19, 1970) approved the use of a "Fortified Bake Product with Cream Filling for Use in Breakfasts and Supplemental . . . Feeding Programs." FNS Notice 180 is being replaced by Instruction 783 on Formulated Grain-Fruit products.

These questions and answers reflect the new instruction as well as the old notice.

Q. What is the fortified baked roduct?

A. The fortified baked product is a product which combines the

bread/cereal and fruit/juice components of the breakfast program. When eaten with a half-pint of whole milk, the product meets USDA's breakfast pattern, regularly three components.

The product is available in a variety of flavors and is made from flour, fats, sugar, and one or more of the following: nonfat dry milk, eggs, sodium or calcium caseinate, and other protein derivatives from milk or soy sources, as well as vitamins and minerals. Vitamin C is added after the product is baked to avoid loss during the baking.

Q. What are formulated grain-fruit products?

A. Formulated grain-fruit products are new foods that have been nutritionally fortified to substitute for the bread/cereal and fruit/juice requirements of the School Breakfast Program and breakfast served in the Special Food Service Program for Children. The product may also be used to meet the bread/cereal and one-half the juice/fruit requirement of the supplemental foods, snacks served between meals, in the Special Food Service Program for Children. Products fall into two groups: graintype products with the primary ingredient being derived from grain, and fruit/grain products, with the primary ingrédient being fruit.

Q. What percentage of the recommended dietary allowance (RDA) will grain-fruit products and a half-pint of whole milk provide?

A. When a child consumes the product and a half-pint of milk, he will get at least ¼ the RDA (except for calories) for a 10–12 year–old child. The product cannot substitute for milk.

Q. What is USDA's interest in these grain-fruit products?

A. USDA believes that a proper balance of conventional foods can provide an adequate diet. However, recognizing the advances that have been made in food technology, FNS is approving new foods to permit schools lacking kitchen and serving facilities to serve food.

Q. If a school has adequate kitchen and serving facilities, may a school use these products?

A. Yes, but schools with adequate kitchen and serving facilities are encouraged to serve a conventional breakfast. These products were approved primarily for use in schools with limited facilities.

Q. How much do the products cost?

A. Presently, two companies' products have been approved. Schools pay 8 cents for one, and approximately 10 cents for the other.

Q. Will the products be available in stores?

A. One product is presently available only in test markets. The other is not yet on the open market.

Q. How will the consumer be able to distinguish the grain-fruit products from regular baked items being sold in stores?

A. Unless the consumer is familiar with the new foods' brand names, he will not be able to readily identify them from regular items. Because of fortification, the price of new foods will probably be slightly higher than regular items. We believe that manufacturers of these new products should take the initiative in providing educational programs to inform the public of the difference.

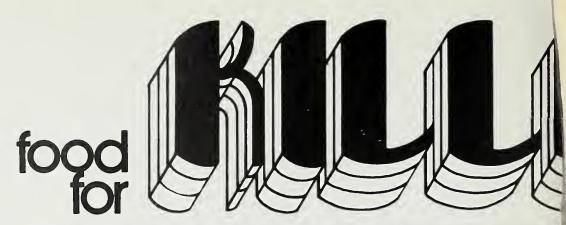
Q. Is there a possibility that new items such as grain-fruit products might undermine nutrition education programs in our schools?

A. The grain-fruit products are intended to meet a specific need—to feed children in schools with inadequate food facilities. Information on new foods should be included in a school's nutrition education program so that the child understands the difference between these foods and conventional foods.

Q. Will a list of suppliers and their respective brand names of products be available for school lunch managers?

A. Yes. We expect to develop a list of products acceptable for use that will be kept current as new items become available.

Prepared by the Nutrition and Technical Services Staff, Dr. Daniel Rosenfield, Director.





TRAVEL BROCHURE might describe Killi Island as a garden paradise, covered with swaying palms, flanked by white sandy beaches, inhabited by friendly carefree islanders who live a life of unhurried ease.

While the setting may be right, the situation isn't that simple.

Killi, which is one square mile of land 2,500 miles southwest of Hawaii, is in the U.S.-administered Marshall District of the Trust Territory. Bikini Atoll, site of U.S. nuclear testing from 1946 to 1958, has special meaning to the residents of Killi Island—it is their ancestral home.

In 1949, 170 former residents of Bikini Atoll were settled on Killi Island, and for years they were self-sufficient, supplying their needs from the island and the sea. Additionally, they harvested coconut for copra (dried coconut meat pressed for oil), which they sold to the government of the Trust Territory, and wove popular Killi handbags. Every 2 or 3 months the government supply ship would come by, and the islanders could purchase what they needed.

However, families of 10 are about average on Killi, and the population has more than tripled over the years. Currently there are about 400 people living on the island. Another 200 have moved to other islands in the Trust Territory.

But, food has lately become a problem for the Killi Islanders. While the sea around the island abounds in tuna, it is also infested with sharks, which often seize the catch. To supplement their food intake, therefore, the islanders began eating copra,



The first shipment of food is loaded onto a small fishing boat for transport to shore.

which caused them to lose a major source of income. The islanders' only other income comes from the Killi handbag, which takes 2 to 3 weeks to complete.

Last October the high commissioner of the Trust Territory, Edward Johnston, applied to USDA for a family food distribution program for Killi. By January the first shipment of food arrived via commercial carrier in the Marshall's District Center,

Majurn Atoll. From there it was loaded aboard the 100-foot government-owned vessel, Yap Islander, for transport to Killi.

Once at Killi, however, the Y Islander, because of the reef, shallowater, and absence of any dockin facilities, had to anchor a quart mile off shore. The 3 months' support food was then transferred from the ship over the reef to shore via a 1 foot fishing boat. It took 8 hours

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day that the islanders called very calm—with only 6 to 8 foot waves mming the beach. The government the Trust Territory is currently inestigating the possibility of obtaing a surplus military amphibious inding craft to aid in the operation. Eleven different kinds of food were ipped to Killi, and with the excepof rice, all were new to the

slanders. The foods were: canned

killi Islanders gather on the beach to carry the supply to the center of the Island.

dehydrated potatoes, vegetable shortening and rice. Getting the food to Killi was one thing, getting the people to eat it was another. A nutritionist from the

luncheon meat, canned pork, peanut

butter, canned peas, evaporated milk,

government of the Trust Territory, Mrs. Hattie Baker, agreed to spend 2 weeks teaching the Killi Islanders how to use the foods.

Mrs. Baker began by experimenting

with the foods to find the right combination for the Killi Islanders. For measuring cups she used coconut shells cut to just the right size. Mrs. Baker is as adept as the Killi Islanders at cooking over an open fire or on their small kerosene burners and halved 50 gallon oil drums with wire grates.

Once a recipe was decided on, it was translated into the local language, Marshallese, and the women of Killi were shown how to make it. In addition to making good use of the food, the islanders plan to use the containers the food comes in. Household utensils are scarce on Killi, and the islanders will use the jars for glasses and bowls and the tins for cooking and storage.

Because of the high temperatures and humidity on Killi, the storage life of food is very limited. Flour and rice cannot be stored longer than 3 months, and there is no refrigeration. The citizens of Killi are building a storage facility for the food. Because of the lack of storage space in the small plywood and corrugated metal homes, distribution of foods will be on a bimonthly basis.

Pre-certification of the residents of Killi was handled by Mrs. Baker on a previous trip to the island. Final certification was completed on the day the food arrived; and, with the exception of a few school teachers, everyone, including the island's medical officer was eligible for participation in the family food distribution program.

Successful institution of the family food distribution program on Killi Island has led officials to evaluate the situation on two other islands with unique food problems.

ulter, egg mix, all purpose flour,

food and nutri

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FOOD AND NUTRITION is published bimonthly by the Food and Nutrition Service, U.S. Department of Agriculture, Washington, D.C. 20250. The use of funds for printing this publication was approved by the Director of the Office of Management and Budget December 4, 1970. Yearly subscription is \$1.00 domestic, \$1.50 foreign. Single copies 20 cents each. Subscription orders should be sent to the Superintendent of Documents, Government Printing Office, Washington, D.C. 20250.

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U.S. DEPARTMENT OF AGRICULTURE

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